CAPTRON Capacitive Switches

Overview

SENSORswitches are capacitive pushbuttons that are activated without pressure, using a hand or other parts of the body. The buttons have a determinate sensing distance, which may be altered by varying the approach speed and/or damping factor. A quickly approaching finger will achieve a higher sensing distance than a slowly approaching finger. A hand, with its larger damping surface, will achieve a greater sensing distance than a finger at the same speed. The sensitivity of the buttons is specified by the electronic circuit and cannot be changed. All sensors are checked for consistent sensitivity values, which have been determined by long-standing experience.



Static - The output signal

Switch Type

- The output signal is continuously on as long as the sensor area is activated.

Dynamic

- The output signal length is limited to x milliseconds when the sensor area is activated.

Toggle

- The output signal turns on when the sensor area is activated and stays on until the sensor area is activated again.

LED Control

Semi-Automatic

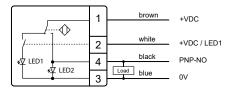
Semi-Automatic (4-Pin) LED1 can be controlled separately. Ideal for when the system designer would like to display a flashing signal to prompt the user to activate and or touch the switch.

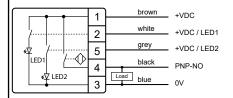
Manual

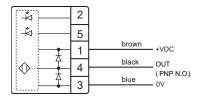
Manual (5-Pin) LED1 and LED2 can be controlled separately. Ideal for use when the user would like to show optical feedback acting like a signal indicator (e.g. CDL series or CML series indicator lights).

Automatic

Automatic (3-Pin) LED1 turns off and the LED2 lights up when the operating surface is touched. Ideal choice for all Human-Machine Interface (HMI) applications that require an intuitive and clearly visible status display.









CAPTRON CANEO Series10 Stainless Steel Capacitive Switches







OIO-Link

CS10SMTDT-C12-044C

CS10SMTDT-C20-0453

CS10SMTDT-B14-045E

| *22mm Series10 Stainless Steel Capacitive Switches | | | | | | | | | |
|--|---------|----------------------------|----------------|----------------|--------------|-----------------------|----------------------|-----------------------------|-----------------|
| Part Number | Price | LED Color (Idle/Active) | Switch Type | LED Control | Legend | Symbol Illuminated | Connection (M12)/ | Output Pulse | Drawing Link |
| CS10SMTDT-C10-0448 | \$73.00 | green/red | Dynamic | Semi-automatic | START | - No | 4-pole | Approx. 300ms | PDF |
| <u>CS10SMTDT-C10-0449</u> | \$73.00 | | Static | | | | | Continuous when actuated | PDF |
| <u>CS10SMTDT-C11-054F</u> | \$73.00 | red/green | Dynamic | | STOP | | | Approx. 300ms | <u>PDF</u> |
| <u>CS10SMTDT-C11-0550</u> | \$73.00 | | Static | | | | | Continuous when actuated | <u>PDF</u> |
| <u>CS10SMTDT-C12-044C</u> | \$73.00 | green/red | Dynamic | | ON/OFF | | | Approx. 300ms | PDF |
| <u>CS10SMTDT-C12-044D</u> | \$73.00 | | Static | | | | | Continuous when actuated | <u>PDF</u> |
| CS10SMTDT-C12-044E | \$73.00 | | Toggle | | | | | Toggle | <u>PDF</u> |
| <u>CS10SMTDT-C16-044F</u> | \$73.00 | | Static | | Power Symbol | | | Continuous when actuated | <u>PDF</u> |
| <u>CS10SMTDT-C16-0551</u> | \$73.00 | red/green | Static | | | | | | <u>PDF</u> |
| <u>CS10SMTDT-C17-0451</u> | \$73.00 | - green/red | Dynamic | - | START | | | Approx. 300ms | <u>PDF</u> |
| <u>CS10SMTDT-C17-0452</u> | \$73.00 | | Static | | | | | Continuous when actuated | <u>PDF</u> |
| CS10SMTDT-C20-0453 | \$73.00 | | Dynamic | | - | | | - Approx. 300ms | PDF |
| <u>CS10SMTDT-C20-0454</u> | \$73.00 | | | Manual | | | 5-pole | | <u>PDF</u> |
| <u>CS10SMTDT-C20-0455</u> | \$73.00 | | Static | Semi-automatic | | | 4-pole | Continuous when actuated | PDF |
| <u>CS10SMTDT-C20-0456</u> | \$73.00 | | | Manual | | | 5-pole | | <u>PDF</u> |
| <u>CS10SMTDT-B10-0457</u> | \$73.00 | | Dynamic | Semi-automatic | START | Yes | 4-pole | Approx. 300ms | <u>PDF</u> |
| <u>CS10SMTDT-B10-0458</u> | \$73.00 | | Static | | | | | Continuous when actuated | <u>PDF</u> |
| <u>CS10SMTDT-B11-045B</u> | \$73.00 | red/green | Dynamic | | STOP | | | Approx. 300ms | PDF |
| <u>CS10SMTDT-B11-045C</u> | \$73.00 | | Static | | | | | Continuous when actuated | PDF |
| <u>CS10SMTDT-B14-045E</u> | \$73.00 | | | | Power Symbol | | | | <u>PDF</u> |
| CS10SMTDT-B14-0460 | \$73.00 | red/green | | | | | | | PDF |

*Purchase cable separately.

CAPTRON CANEO Series10 Stainless Steel Capacitive Switches

| 22mm Series10 Stainless | Steel Capacitive Switches Specifications | | | | |
|-------------------------|--|--|--|--|--|
| Supply Voltage | 24VDC [8.4 to 32V] | | | | |
| Output | PNP-N.O. | | | | |
| Load Current | Max 200mA | | | | |
| Current Consumption | Max 40mA @24V | | | | |
| Operating Temperature | -30 to 65°C [-22 to 149°F] | | | | |
| Storage Temperature | -30 to 65°C [-22 to 149°F] | | | | |
| IP Rating | IP69K | | | | |
| Material | Housing: Stainless Steel (V4A) Switch surface: Polycarbonate (PC) | | | | |
| Weight (lbs) | 0.1 | | | | |
| Agency Approvals | CE, CSA | | | | |

| IO-Link Specifications | | | | |
|------------------------|------|--|--|--|
| IO-Link | v1.1 | | | |
| Port Speed | COM2 | | | |
| SIO Supported | Yes | | | |
| ISDU Supported | Yes | | | |
| Data Storage | Yes | | | |
| Block Parameter | No | | | |

Wiring Diagrams

Plug M12, 4-pin 4 N/A 1 2 2

